(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 11 August 2005 (11.08.2005)

PCT

(10) International Publication Number WO 2005/072171 A2

- (51) International Patent Classification:
- Not classified
- (21) International Application Number:

PCT/US2005/001452

- (22) International Filing Date: 18 January 2005 (18.01.2005)
- (25) Filing Language:

(26) Publication Language:

English

(30) Priority Data: 60/539,816

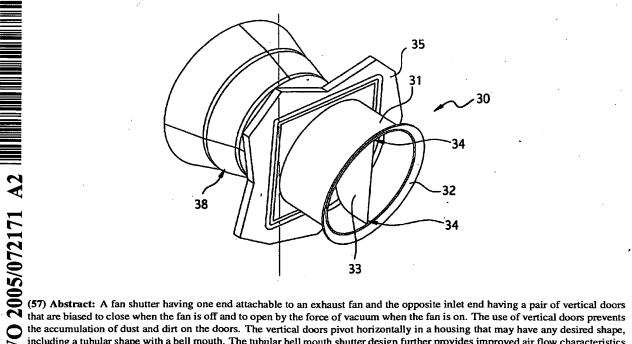
28 January 2004 (28.01.2004)

- (71) Applicant (for all designated States except US): HH TECHNOLOGIES, INC. [US/US]; P.O. Box 99, 1733 County Road 68, Bremen, AL 35033 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): JENKINS, Lesley, Ray [US/US]; 406 Section Line Road, Hanceville, AL 35077 (US). DANIELS, Waymon, Neal [US/US]; 2291 Shiloh Fort Lamar Road, Danielsville, GA 30633 (US).

- (74) Agent: BUSH, Kenneth, M.; Buch Intellectual Property Law Group, LLC, P.O. Box 381146, Birmingham, AL 35238 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: VERTICAL DOOR FAN SHUTTER



including a tubular shape with a bell mouth. The tubular bell mouth shutter design further provides improved air flow characteristics and decreased stress on the exhaust fan, compared to conventional fan shutters.

WO 2005/072171 A2



Published:

 without international search report and to be republished upon receipt of that report For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.